



EC3002

Fast Ethernet Metro Access CPE



Product Overview

The Edge-Core EC3002 is a Fast Ethernet fiber premises equipment with 1 10/100 RJ-45 port and 1 100BaseBX WDM port. The optical fiber port can support lengths of up to 15km and is TTC TS-1000 standard compliant for maintenance capabilities and system management. EC3002 is ideal for Fiber to the building (FTTB) or Fiber to the home (FTTH) deployments.

Key Features and Benefits

Performance and Scalability

An FTTH Switch such as the Edge-Core ES3528-WDM can be placed in the Central Office of Internet Service Providers (ISP) to deliver wire-speed switching performance on all ports to subscribers over a single fiber to the subscriber site.

At the subscriber site, the optical signal is converted into an electrical signal using the Media Converter EC3002.

It is ideal for ISPs providing Fiber to the Home or Fiber to the Building broadband services with up to 100Mbps upstream and downstream data rates. Using the ES3528-WDM/EC3002 solution, high-speed data and high quality voice and video services are a reality.

The Central Office can do loop back tests to the subscriber's Media Converter to troubleshoot network connectivity for easy maintenance.

Management and Deployment

Plug-and-play for easy installation and use.

Built-in transparent bridging between different media segments.

Supports UTP port MDI/MDI-X detection

Supports port-based VLAN/tag-based VLAN.

Space saving and compact size that is suitable for desktop or wall mounting.

Automatic load of Vendor Code and Model number from external EEPROM

The ES3628-WDM and EC3002 are fully compliant to TTS TC-1000 OAM standards.

Linking distances between the FTTH Switch and the Media Converter can be up to 15km.

ES3002 Product Specifications

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Features

Physical Specifications

- 1 100Base-FX single fiber port (for connection to Central Office
- 1 10/100Base-TX RJ-45 port (for connection on subscriber site) 1 4-pin piano switch regulating: full/half duplex mode and 10/100
- Mbps speed MDI/MDI-X on RJ-45 ports

Key Features

Programmable maximum Ethernet frame size: 1518 - 1536

Denying/Allowing Forwarding MAC addresses

MAC address table size: 2K with 4 layer hashing table for automatic MAC

address learning

Optional Link Pass Through Function

Optional Pause Frame By-Pass Function

Auto-negotiation for port speed and duplex mode

802.3x Flow Control: Back-Pressure for half-duplex mode and Pause frame for full-duplex mode

Optical Features

- Wavelength: Transmit-1310nm, Receive-1550nm
- Cable: 9/125um Single Mode Fiber (ITU-T G.652)
- Connector: Single SC Connector
- Transmitting Power Range: -8 ~ -14dBm
- Receiving Power Range: -8 ~ -30dBm
- Link distance: 15km

IEEE Standards Compliance

IEEE 802.1Q VLAN

IEEE 802.3 Ethernet

IEEE 802 3u East Ethernet

IEEE 802.3x Flow Control

IEEE 803.3ac VLAN Tagging

Management

Plug N Play

4-pin Piano switch

Loop Test support

Mechanical

Dimensions (H x W x D): 35 x110 x180 mm

Weight: 250g

LED indicators: Power, Optical Link, Half/Full, Loop back testing, data and PC

Safety

CSA/NRTL (UL60950, CSA60950)

Electromagnetic Compatibility

CE Mark

FCC Class B VCCI Class B

Environmental Specifications

Temperature:

- IFC 68-2-14
- 0°C to 40°C (Standard Operating)
- -20°C to 70°C (Non-Operating)

Humidity: 10% to 90% (Non-condensing)

Power

Power Consumption: 3W maximum

Power Supply: 1A at +12V (External power adapter 50/60Hz 100-120V AC

included)

Warranty

Limited lifetime warranty

Ordering Information

Optional Accessories Package Contents Product Description